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TITLE CHIMERA INSECTICIDAL PROTEIN OF BACILLUS THURINGIENSIS

ABSTRACT PURPOSE : To obtain a chimera insecticidal protein gene, by cleaving a gene capable of coding two species of insecticidal proteins of *Bacillus thuringiensis* with a restriction enzyme and replacing the respective corresponding regions.

CONSTITUTION : A gene capable of coding 125 KD insecticidal protein and 130 KD insecticidal protein of *Bacillus thuringiensis* subsp. *aizawai* IPL strain is cleaved with restriction enzymes KpnI and HindIII to provide respective three regions of base Nos. (1-2174),

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(2175-2744), (2745-3465) and (1-2174), (2175-2822) and (2823-3528) and the respective regions of base Nos. (1-2174) are then cleaved with EcoRI and EcoRV to afford three regions of base Nos. (1-994), (995-1567) and (1568-2174). Thereby the respective five regions are obtained. The corresponding regions (one of the three or five regions) of both genes are replaced to construct a chimera insecticidal protein gene. A microorganism transformed with a gene expression plasmid containing the above-mentioned genes is cultivated to afford the aimed chimera insecticidal protein effective against diamondback moth (*Plutella xylostella*) and *Prodenia litura* (tobacco cutworm)